Rockwall ISD
5th Grade Math Parent Guide

	1st Grading Period	2nd Grading Period	3rd Grading Period	4th Grading Period
Process TEKS *(How we <u>do</u> the math)*	**A** Apply mathematics to problems arising in everyday life, society, & the workplace **B** Use a problem solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, & evaluating the problem-solving process & the reasonableness of the solution **C** Select tools, including real objects, manipulatives, paper & pencil, & technology as appropriate, & techniques, including mental math, estimation, & number sense as appropriate, to solve problems **D** Communicate mathematical ideas, reasoning, & their implications using multiple representations, including symbols, diagrams, graphs, & language as appropriate **E** Create & use representations to organize, record, & communicate mathematical ideas **F** Analyze mathematical relationships to connect & communicate mathematical ideas **G** Display, explain, & justify mathematical ideas & arguments using precise mathematical language in written or oral communication			
Units	**<u>Unit 1</u>:** *Extending Whole Numbers/Decimals & Algebraic Relationships* 5.2ABC, 5.3ABCK, 5.4AEF, 5.9AC, 5.10CDEF **<u>Unit 2</u>:** *Multiplication Operations with Decimals* 5.3ADE, 5.4ABEF, 5.9AC, 5.10AB **<u>Unit 3</u>:** *Division Operations with Decimals* 5.3AFG, 5.4BEF, 5.9AC	**<u>Unit 3</u>:** *Division Operations with Decimals (continued)* 5.3AFG, 5.4BEF, 5.9AC **<u>Unit 4</u>:** *Operations with Fractions (comparing, improper, mixed, equivalent, & simplifying fractions)* 5.3AHIJKL, 5.4EF, 5.9AC	**<u>Unit 5</u>:** *Patterns on a Coordinate Plane & Algebraic Relationships* 5.4BCD, 5.8ABC **<u>Unit 6</u>:** *Geometry & Contextual Measurement* 5.4BGH, 5.5A, 5.6AB, 5.7A **<u>Unit 7</u>:** *Focus on Data Analysis* 5.9ABC	**<u>Unit 8</u>:** *Deepening & Spiraling Readiness Standards* 5.2B, 5.3EGKL, 5.4BCFH, 5.5A, 5.8C, 5.9C, 5.10ABEF **<u>Unit 9</u>:** *Applications of Mathematical Concepts* Apply all 5th grade standards to ensure mastery of grade level
Topic Focus	**<u>Unit 1</u>:** Students will extend their knowledge of place value to the thousandths using expanded notation, rounding decimals & comparing/ordering decimals. Students will add & subtract decimals to the thousandths, multiply 3-digit by 2-digit whole numbers & divide 4-digit dividend & 2-digit divisors. Students will be introduced to prime & composite numbers, balancing a simple budget & order of operations. Students will solve one- & two-step problems from frequency tables, bar graphs, & dot plots. **<u>Unit 2</u>:** Students will be introduced to finding products to the hundredths using pictorial models & the standard algorithm, including simplifying expressions. Students will be introduced to representing & solving multi-step problems with whole numbers and	**<u>Unit 3</u>**: *continued* **<u>Unit 4</u>**: Students will simplify fractions & convert between mixed number & improper fractions. Students will represent & solve addition, subtraction, multiplication & division of fractions, including simplifying expressions. Students will solve one- & two-step problems from frequency tables, bar graphs & dot plots including fractions.	**<u>Unit 5</u>**: Students will be introduced to graphing in the 1st quadrant & additive/multiplicative relationships. **<u>Unit 6</u>**: Students will extend their understanding of 2D figures to classify & organize them into sets & subset. Students will represent & solve problems related to perimeter, area & volume. Students will convert customary & metric units. **<u>Unit 7</u>:** Students will solve 1 & 2 step problems on a frequency table, dot plot, bar graph, stem & leaf plot, & scatterplot using whole numbers, decimals & fractions.	**<u>Unit 8</u>**: Students will review & deepen their understanding of all 5th grade standards in preparation for the STAAR test. **<u>Unit 9</u>:** Students will apply all 5th grade standards to ensure mastery of grade level content.

	unknowns/variables. Students will solve one- & two-step problems on a frequency table, dot plot, & bar graphs while including decimals. Students will define all types of taxes. **Unit 3**: Students will be introduced to representing & solving quotients to the hundredths using pictorial models & the standard algorithm, including simplifying expressions. Students will extend their knowledge of representing & solving multi-step problems with whole numbers and unknowns/variables. Students will solve one- & two-step problems on a frequency table, dot plot, & bar graphs while including decimals. Students will define net and gross income.			
Suggestions for Parental Involvement/ Support	**Place Value of Decimals** - Have students make decimals cards up to three decimal places (thousandths) and have them compare, order greatest to least or least to greatest, and write in standard form, expanded form, and word form. Decimal Place Value videos **Addition/Subtraction of Whole Numbers & Decimals** - Have students use the decimal cards they created for Place Value & find the sum or difference. Include whole numbers up to hundred thousand. Student could then create real world situations (word problem) involving adding & subtracting decimals. When out shopping, apply reasonableness & estimation to calculate totals of items being purchased. Addition/Subtraction videos **Multiplication** - Have students practice their multiplication facts up through 12 x 12 (flash cards, computer games, phone/iPad apps). Please continue to practice	**Division with Whole Numbers & Decimals** - Practice standard algorithm. Remember to include remainders (left overs) **Operations with Fractions** - Ask your child to identify fractions around the house *(ex. What fraction of the shirts in your closet are red? What fraction are blue?*) Compare these fractions. Find the sum or difference of these fractions. Find equivalent fractions when cooking/baking. *(ex. I need ½ cup of oil, but I don't have a ½ measuring cup. What other size measuring cups could you use to make the ½ cup? Two ¼ cups, four ⅛ cups, etc.)* Fraction Operation videos	**Patterns & Coordinate Grids** - Have your child identify, label, & practice plotting points (whole numbers, decimals, & fractions) on a coordinate plane (First quadrant only). Algebraic Thinking videos **Geometry & Measurement** - Have your child identify & solve for perimeter, area & volume problems. (Use real world items ex. Length, width & height of table top, bathtub, backyard) Coordinate Grid & Geometry videos Have your child identify, compare, contrast & find real world examples of all types of quadrilaterals (parallelogram, rectangle, rhombus, square, trapezoid) Measurement & Data videos **Data Analysis** - Have your child create a survey & create tables, charts, or graphs that represent the data they collect. (dot plot, stem & leaf, bar graph, scatterplots)	**Spiraling Readiness Skills**- Have your child practice adding, subtracting, multiplying & dividing whole numbers, decimals & fractions.

	these facts throughout the school year. Multiplication/Division videos			
General Resources	**Khan Academy:** https://www.khanacademy.org/math **Math 4 Texas:** https://www.math4texas.org/ **Imagine Math & Imagine Math Facts: Login through Google Dashboard** **Graham Fletcher Progression Videos:** https://gfletchy.com/progression-videos/ **Interactive Math Glossary:** https://www.texasgateway.org/resource/interactive-math-glossary **Virtual Manipulatives & Strategy Charts:** 5 Math Manipulatives Page			